



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,356	05/24/2007	Marie-Francoise Erny	4590-548	3239
33308	7590	11/18/2008		
LOWE HAUPTMAN & BERNER, LLP 1700 DIAGONAL ROAD, SUITE 300 ALEXANDRIA, VA 22314				
EXAMINER				
ABRISHAMKAR, KAVEH				
ART UNIT		PAPER NUMBER		
2431				
MAIL DATE		DELIVERY MODE		
11/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,356

Applicant(s)

ERNY ET AL.

Examiner

KAVEH ABRISHAMKAR

Art Unit

2431

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the communication filed on June 19, 2007. Claims 1-8 were originally pending consideration. Per the preliminary amendment, claims 1-8 are amended and claim 9 has been added.
2. Claims 1-9 are currently pending consideration.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 1, 2, and 4, state in their first limitations, "if the signal received on the local data interface is not valid." It is unclear what a signal being not valid means in the scope of the claim. It is not clearly what makes a signal invalid as opposed to valid and this renders the claim indefinite.
5. Claims 1, 2, and 4 also state that "when the integrity is OK" and when "integrity is KO." It is not clear what "OK" and "KO" mean in this context. The Examiner assumed that "OK" means that the auto test being "OK" means that it passes without any errors. However, it is unclear what "KO" means in the context of the claims, rendering the claim indefinite.

6. Claim 1 recites the limitation "the signal" in the first limitation. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 4 recites the limitation "the signal" in the first limitation. There is insufficient antecedent basis for this limitation in the claim.
8. Claim 4 recites the limitation "the fuse" in two of the final 4 limitations. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 6 recites the limitation "the signal" in the first limitation. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Sormunen et al. (U.S. Patent Pub. No. US 2003/0014663).

Regarding claim 1, Sormunen discloses:

A method to detect and/or to avoid the modification of software embedded in a programmable memory within a system comprising a hard kernel containing hardware security functions suitable for verifying the integrity of a soft kernel comprising a

programmable memory, the system comprising a local data interface, comprising the following steps:

placing the system in a disabled state if the signal received on the local data interface is not valid (paragraphs 0032, 0036-0040);

instigating a secure startup procedure, with execution of the control functions if the signal received on the local data interface is a disconnection signal, or there is no signal (paragraphs 0032, 0036-0040);

auto testing of the hard kernel wherein: if the auto test is OK, then test the integrity of the reprogrammable memory (paragraphs 0032, 0036-0040);

if this integrity is OK, then activate the system for normal operation (paragraphs 0032, 0036-0040);

if this integrity is KO, then place the system in a disabled state; if the auto test is KO, then place the system in a disabled state (paragraphs 0032, 0036-0040);

wherein if the received signal is a valid startup signal (paragraphs 0032, 0036-0040);

if the system is in a development mode, render it enabled (paragraphs 0032, 0036-0040);

if the system is in an enabled utilization mode and if the signal is a test signal, then deactivate at least one of the essential functions of enabled operation (paragraphs 0032, 0036-0040).

Regarding claim 2, Sormunen discloses:

A method to detect and/or to avoid illicit modifications of manufacturer software within a GSM-type system, comprising a hard kernel and a soft kernel, a local data interface, comprising at least the following steps:

placing the GSM terminal in a disabled state, if the signal received on the local data interface of the terminal is not valid (paragraphs 0032, 0036-0040);

instigating a secure startup procedure, with execution of the control functions if the signal received on the local data interface is a disconnection signal, or there is no signal (paragraphs 0032, 0036-0040):

auto testing of the hard kernel (paragraphs 0032, 0036-0040) wherein:

if the auto test is OK, then test the integrity of the soft kernel (paragraphs 0032, 0036-0040);

if this integrity is OK, then activate the terminal for normal operation (paragraphs 0032, 0036-0040);

if the integrity is KO, then place the terminal in a disabled state (paragraphs 0032, 0036-0040);

if the auto test is KO, then place the GSM terminal in a disabled state (paragraphs 0032, 0036-0040);

wherein if the received signal is a valid startup signal (paragraphs 0032, 0036-0040);

if the fuse is not blown, render the GSM terminal enabled (paragraphs 0032, 0036-0040);

if the fuse is blown, render the terminal not totally enabled by deactivating at least one of the enabled functions of the terminal (paragraphs 0032, 0036-0040);

if the signal is a signal of JTAG test type, continue the test procedure, if the signal is a test signal, start up in nonsecure mode and continue the test procedure (paragraphs 0032, 0036-0040).

Claim 3 is rejected as applied above in rejecting claim 1. Furthermore, Sormunen discloses:

The method according to claim 1, wherein the exchange of the data between the hard kernel and the soft kernel is performed by using an algorithm based on the principle of non-replay and of nonpredictability of the transmitted data (paragraphs 0032, 0036-0040).

Regarding claim 4, Sormunen discloses:

The system making it possible to detect and/or to avoid the modification of software embedded in a programmable memory comprising a hard kernel containing hardware security functions and a soft kernel comprising a programmable memory, a local data interface able to receive signals, characterized in that it comprises means suitable to:

placing the system in a disabled state when the signal received on the local data interface is not valid (paragraphs 0032, 0036-0040);

for a disconnection signal received or an absence of signal on the local data interface, instigating a secure startup procedure (paragraphs 0032, 0036-0040), with execution of control functions:

auto testing of the hard kernel wherein:

if the auto test is OK, then test the integrity of the programmable memory (paragraphs 0032, 0036-0040);

if this integrity is OK, then activate the system for normal operation (paragraphs 0032, 0036-0040);

if this integrity is KO, then Place the system in a disabled state (paragraphs 0032, 0036-0040);

if the auto test is KO, then place the system in a disabled state (paragraphs 0032, 0036-0040);

for a received signal is a valid startup signal (paragraphs 0032, 0036-0040);

if the system is in a development mode render it enabled (paragraphs 0032, 0036-0040);

if the system is in an enabled utilization mode, and if the signal is a test signal then deactivate at least one of the essential functions of enabled operation on startup (paragraphs 0032, 0036-0040).

Claim 5 is rejected as applied above in rejecting claim 4. Furthermore, Sormunen discloses:

The system according to claim 4, characterized in that it comprises means of securing the data exchanges between the hard kernel and the soft kernel (paragraphs 0032, 0036-0040).

Claim 6 is rejected as applied above in rejecting claim 4. Furthermore, Sormunen discloses:

The system according to claim 4, characterized in that the system is a GSM terminal (paragraphs 0032, 0036-0040).

Claim 7 is rejected as applied above in rejecting claim 4. Furthermore, Sormunen discloses:

The system according to claim 4, characterized in that the system is a micro-computer (paragraphs 0032, 0036-0040).

Claim 8 is rejected as applied above in rejecting claim 4. Furthermore, Sormunen discloses:

The system according to claim 4, characterized in that the system is an MP3-type reader containing a reprogrammable memory (paragraphs 0032, 0036-0040).

Claim 9 is rejected as applied above in rejecting claim 2. Furthermore, Sormunen discloses:

The method according to claim 2, wherein the exchange of the data between the hard kernel and the soft kernel is performed by using an algorithm based on the principle of non-replay and of nonpredictability of the transmitted data (paragraphs 0032, 0036-0040).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAVEH ABRISHAMKAR whose telephone number is (571)272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/583,356
Art Unit: 2431

Page 10

/Kaveh Abrishamkar/
Examiner, Art Unit 2431

/K. A./
11/15/2008
Examiner, Art Unit 2431